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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/523,425	12/05/2005	Alexander Buryak	2085.002US1	1862
21186	7590	04/18/2006	EXAMINER	
SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A. P.O. BOX 2938 MINNEAPOLIS, MN 55402			ULLAH, AKM E	
			ART UNIT	PAPER NUMBER
			2874	

DATE MAILED: 04/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/523,425

Applicant(s)

BURYAK, ALEXANDER

Examiner

Akm Enayet Ullah

Art Unit

2874

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 12-15 is/are rejected.
- 7) ☐ Claim(s) 11 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 1/28/2005
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

***Detailed Action***

*Applicant cooperation is requested in correcting any errors of which applicant may become aware in the specification.*

***Status of the Application***

*Claims 1- 15 are pending in this application.*

*Claims 1-15 are rejected under 35 USC 112 and 103.*

*If applicant is aware of any prior art or any other co- pending application not already of record, he/she is reminded of his/her duty under 37 CFR 1.56 to disclose the same.*

***Claimed Foreign Priority***

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***Claim Rejections - 35 USC § 112***

Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The recitation of claim 1 is considered to be vague and indefinite because it fails to give understanding to the claim what exactly applicant is referring to.

Since the claim language recitation is not a **Jepson Type Format**. It is advisable to delete the word "improvement" and substitute another word.

Line 6 of claim 1, the word "modifying" is vague. What is applicant modifying is not clear in the claim. Similar comment applies throughout the claims.

Lines 4 and 12 of claim 1 the recitation "desired functional spectral domain" and "desired improvement is achieved" are also vague. What constitutes desired? Similar comment applies throughout the claims.

Thus, claims 1-15 are vague and indefinite. Correction is required.

***Claim Rejections - 35 USC § 103***

*The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:*

*(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.*

***Claims 1- 10 and 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over***

***Stepanov et al (US Pub. no. 2004/0146244).***

***Stepanov et al disclose a method of designing a multi-channel grating structure in a waveguide material, the method comprising the step of utilizing a multi-channel grating design function describing an envelop of refractive index variation defining the multi-channel grating structure in the waveguide material, wherein the mutli-channel grating design function deviates from a periodic sampling function multiplied by a single channel design function.***

***Stepanov et al*** reference fails to disclose the recitation **that iterating the method steps until the desired improvement is achieved** as claimed which has not been given patentable weight because it has been held that a preamble is denied the effect of a limitation where the claim following the preamble is a self contained description of the structure not depending for completeness upon the introductory clause. *Kropa v. Robie*, 88USPQ478 (CCPA1951).

***It would have been obvious to one of ordinary skill in the art at the time the invention was made to use such determining a third design function associated with the third response function in Stepanov et al, since it has been held to be within the general skill of a worker in the art to select more than three design function as a matter of obvious design choice. In re Ileshin, 125 USPQ 416.***

***Claims are Objected, Allowable Subject Matter***

**Claim 11 would** be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

***Cited Prior Art***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Haq et al (USP NO, 5,942,956), Feced et al (USP NO. 6,445,852), Rothenberg et al (USPNO. 6,707,967) are also cited to show a typical grating design function respectively.


***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Akm Enayet Ullah whose telephone number is 571-272-2361. The examiners can normally be reached on Monday through Wednesday from 5:30 am to 4:00 p.m.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick, can be reached on Monday through Friday whose telephone number is 571-272-2344. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Akm Enayet Ullah  
Primary Examiner  
Art Unit 2874

*Aullah*

*April 14, 2006*